# Case Studies in Applied Behavior Analysis for Students and Adults with Disabilities

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## CASE STUDIES IN APPLIED BEHAVIOR ANALYSIS FOR STUDENTS AND ADULTS WITH DISABILITIES

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For Curt Hendricks. As great of a friend as a person can hope to have. It's a mighty long way from Walker Hall and we've both been around and seen some ups and seen some downs but through it all we've remained friends. Thanks, man!

#### K.S.

For Mia and Noe Elliott. You two have been my motivation and inspiration. And to my late husband Jim Elliott who always asked, "Did you write today?"

L.H.

### PREFACE

This book is intended to give support providers the knowledge and skills for providing Applied Behavior Analysis services in schools, employment, community, and residential settings thereby improving the quality of life for the individuals they support. The rubber meets the road, not only in how to support an individual with a disability, but also in how to implement services and systems change so that positive quality of life outcomes occur.

This book responds to a critical need for highly qualified personnel who will become exemplary professionals because of their advanced knowledge, skills, and experiences in working with children, students, and adults with varying disabilities, including Autism Spectrum Disorders (ASD). Since board certification for behavior analysts was introduced a little over a decade ago, there has been an expansion of training programs in behavior analysis to meet the demands from consumers (e.g., school districts, health insurers and families). The Behavior Analyst Certification Board (BACB) is a private nonprofit organization without governmental powers to regulate behavior analytic practice. However, it does wield the power to suspend or revoke certification from those certified if they violate the strict ethical guidelines of practice. While the BACB certification means that candidates have satisfied entry-level requirements in behavior analytic training, it does not necessarily mean they have the applied skills to develop and implement interventions, which are often very complex, and must involve a variety of funders and providers and be able to analyze the situation broadly (quality of life, person-centered planning, or systems change, for example). Most health insurance companies also recognize the BCBA credential as one conferring the capability and the right to practice independently in many states. The demand for expertise in Applied Behavior Analysis continues to grow and this demand has been spurred on by: (1) increased recognition of board certification and even licensure in some states; (2) recognition by health insurers and state legislation; (3) the need for behavior specialists in home and school settings; and (4) the increase in individuals with ASD who need ABA services. The BACB is endorsed by the Association of Professional Behavior Analysts, the Association for Behavior Analysis International, Division 25 (Behavior Analysis) of the American Psychological Association, and the European Association for Behavior Analysis. The Behavior Analyst Certification Board has a *Behavior Analyst Task List* Fourth Edition, which outlines the 15 content areas across three major sections that are required for competency as a behavior analyst.

An advantage of this book is that universities, agencies, and organizations preparing support providers can easily use it in courses or trainings that address Applied Behavior Analysis as it covers methodology that is seldom covered in detail in most texts. Those who are already support providers will find the information to be practical and easily implemented in applied settings. We see four main groups who would primarily be interested in this book:

- 1. College instructors teaching courses in Applied Behavior Analysis, School Psychology, Special Education, or related areas. College instructors are likely to choose our book based upon:
  - a. The consistent format throughout the book.
  - b. The "practicality" and "readability" of the book for students in college.
  - c. The comprehensive analysis and coverage of developing supports for individuals with disabilities.
  - d. The direct applicability to applied settings.
  - e. The ability to use the case studies as assignments and/or exams.
- 2. Individuals taking courses or studying for their BCBA exam.
- 3. Individuals working in the disability field.
- 4. Individuals studying to work in the disability field.

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## CASE STUDIES IN APPLIED BEHAVIOR ANALYSIS FOR STUDENTS AND ADULTS WITH DISABILITIES

### OVERVIEW OF APPLIED BEHAVIOR ANALYSIS FOR STUDENTS AND ADULTS WITH DISABILITIES

The foundation of Applied Behavior Analysis (ABA) is based upon the work of B. F. Skinner (1953, 1971). Skinner was a psychologist who advocated that the focus of education and interventions should be on the behavior of individuals rather than on internal states (O'Donohue & Ferguson, 2001). Behavior may be defined as observable actions that a person does. Sitting in a seat, completing a math problem correctly, raising one's hand to answer a question, cursing, and running out of the room are all observable behaviors (verbal behaviors are classified as behaviors as well). These are all behaviors that can be changed (for better or worse). Being motivated, trying hard, and being unruly are not observable behaviors, and thus cannot be directly changed.

John Watson (1913) is often credited as being the first behavioral psychologist. In his 1913 manifesto he wrote that, "Psychology as the behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is the prediction and control of behavior." For Applied Behavior Analysis the key words are "prediction" and "control." Good support providers<sup>1</sup> are effective at predicting what will work in their intervention situation (such as in a classroom using active responding strategies, reinforcing classroom rules, and using cooperative learning strategies), and then controlling the environment around that individual so these behaviors occur. Sometimes support providers have concerns with the concept of control and view control as being a bad thing. However, not positively controlling the support situation only leads to anarchy and poor outcomes. For

<sup>1.</sup> By support providers we mean to include parents, teachers, behavior specialists, school psychologists, job coaches, supported living staff and others who are providing services to individuals with disabilities.

instance, by doing things such as having set routines, classroom rules, and praising students for completing assignments, the teacher is "controlling" student behavior. Having a teacher controlling a classroom environment in this way is good teaching and is not deceitful or wrong. In other words, the focus is on the cause and effect relationship between the environment and the behavior of the student (Nye, 1992). This cause and effect is not a one-way process as there is the issue of counter control where the behavior of the student also influences the environment (e.g., the behavior of the teacher).

As they read this, many support providers may be thinking, "I do this every day." Good support providers use these types of strategies all the time. In this text, we are presenting a coherent and systematic approach to understanding the purpose of Applied Behavior Analysis and how support providers can implement these strategies to arrive at the desirable results for carefully targeting the behaviors that need changing, as opposed to a "hit and miss" strategy that many support providers use. In behavior analysis, it is assumed that the behavior of an individual is lawful. This means that an individual does things for a reason such as being previously reinforced for a behavior (such as putting dishes in the dishwasher) or being punished for a behavior (such as making a socially inappropriate remark to a peer). In other words, each individual has a history of being reinforced or punished for certain behaviors and this history influences their current behavior (Morgan, 2010). For example, if a student consistently receives reinforcement for turning in homework (praise from teachers, positive feedback on the homework, good grades, and/or positive notes home to parents) then the student is likely to continue to turn in homework consistently. A student who does not receive this reinforcement for turning in homework is less likely to turn in homework assignments consistently.

The three basic assumptions of Applied Behavior Analysis are:

- 1. Most behavior is learned.
- 2. Behavior can be changed by altering antecedents and/or consequences.
- 3. Factors in the environment (the home, classroom, or school, etc.) can be changed to increase and maintain specific behaviors or to decrease specific behaviors.

Behavior analysts agree that people feel and think, but they do not consider these events (feeling and thinking) as causes of behavior. It is the observable behaviors of the individual that are relevant for analysis and an intervention to change those behaviors. For instance, a child with Autism Spectrum Disorder (ASD) may engage in certain "undesirable" behaviors (such as screaming, throwing kitchen utensils, hitting siblings, or refusing to brush their teeth). To analyze these behaviors as "feelings" of the child is not helpful as it is an inference as to the causes and the support provider cannot directly change the feelings of a child.

Applied Behavior Analysis focuses on the behavior of people. Behavior is not considered to be an expression of inner causes like personality, cognition, and attitude. Poor performance on coursework, not attending school, engaging in self-stimulatory behavior, or not keeping a job are analyzed as problems of behavior rather than examples of a person having a "poor attitude," being "unreasonable" or having a "disability label" such as Down Syndrome. Interventions for these and other undesirable behaviors are directed at changing environmental events (teacher behaviors, parent behaviors, a job coach teaching specific work tasks) to improve behavior (e.g., to increase desirable behavior). For example, engaging in peer tutoring for coursework and using a self-management strategy to increase a specific job performance skill such as task completion could change the person's undesirable behaviors for the better and by doing so could change the "poor attitude" or "unemployability" of the person. However, this is accomplished only by changing specific behaviors of the person.

So the focus is not only on the behaviors of an individual, but also on understanding why that individual engages in certain behaviors (e.g., the function of the behavior).

Kazdin (2008) succinctly summarizes this issue:

Even today, even at our most scientifically precise, we can't always or even often locate the exact source of a behavior problem. . . We know how to change behavior for the better, regardless of its exact cause, and our best bet is to just go ahead and change it. Instead of treating the child as if there's something wrong inside her that needs to be fixed, let's treat the *behavior* as the something wrong, and address it directly. In practice, that means locating the problem in the relationship between the child and the situation around him, in how he interacts with other people and things (which might well include flaws in the therapy or how it's delivered). (p. 169)